https://doi.org/10.24386/LepidHung.2022.18.1.55 HU ISSN 2732-3854 (print) | HU ISSN 2732-3498 (online)

Lepidopterologica Hungarica 18(1): 55–70. | https://epa.oszk.hu/04100/04144

Received 22.03.2022 | Accepted 28.03.2022 | Published 05.04.2022 (online) | 26.06.2022 (print)
Zoobank: https://zoobank.org:pub/D83D6B5C-E449-44B3-9BEC-3C2B77B9D771
Zenodo: https://zenodo.org/deposit/6412446

New records on the Balkan Coleophoridae with description of *Coleophora colinplanti* Baldizzone & Richter, sp. nov. (Lepidoptera, Coleophoridae)

Giorgio Baldizzone* & Ignác Richter

Citation. Baldizzone G. & Richter I. 2022: New records on the Balkan Coleophoridae with description of *Coleophora colinplanti* Baldizzone & Richter, sp. nov. (Lepidoptera, Coleophoridae). – Lepidopterologica Hungarica 18(1): 55–70.

Abstract. The paper deals with new records on the geographical distribution of 34 Coleophoridae in the Balkan area. Moreover, is described *Coleophora colinplanti* Baldizzone & Richter, sp. n., from North Macedonia, belonging to the group of *Coleophora kahaourella* Toll, 1957

Keywords. Lepidoptera, Coleophoridae, new species, distribution, Balkan area.

Addresses of the authors. Giorgio Baldizzone | I-14100 Asti, via Manzoni 24, Italy |
E-mail: baldizzonegiorgio@gmail.com | Orcid 0000-0001-8127-0843
Ignác Richter | SK-97101 Malá Čausa 289, Slovakia | E-mail: ignac.richter@gmail.com
Orcid 0000-0001-8122-8709

Introduction

During the 21st century a good number of distributional and taxonomic works have been published which have significantly increased the number of the Coleophoridae known for the Balkan area (Richter & Pastoralis 2015; Richter, 2017, 2018; Baldizzone, 2016b, 2019b, 2019c). This result derives from the field researches of the authors of this paper, and of many collectors who have given their specimens to the two authors for determination. The publication aims to present further data on the distribution of 34 species of this family and also to describe a new species collected in North Macedonia: *Coleophora colinplanti* Baldizzone & Richter n. sp.

Material and methods

The Euparal slide mounts of dissected genitalia were photographed with a Bresser MicroCam II 12 MP attached to a BTC trinocular microscope, mainly using the Nikon 10/0.30 objective. The CombineZP program was used for stacking layers into deep-focus images. The photos were cleaned and edited with Adobe Photoshop version 21.0.2. Adults were photographed with a Canon EOS 600 D digital camera equipped with a Canon MP-E 65 mm objective, with lighting provided by two circular neon lamps OSRAM L 32W / 8400 C (cool white).
Morphological terms follow Baldizzone (2019a).

Abbreviations. coll. = collection; det. = determinavit; IgR = Ignác Richter; leg. = legit

*Contribution to the knowledge of Coleophoridae CLIII

Description of new species

Coleophora colinplanti Baldizzone & Richter, sp. nov. (Figs. 1, 2, 3, 5)

Holotype: ♂ (GP 31535 IgR): North Macedonia, Galičica NP, 1666 m 40°989'622'' N | 20°877'730'' E, 31. VIII. 2021, leg. Ignác Richter, in research collection of Ignác Richter.

Paratype: ♂ (GP 30030 IgR): North Macedonia, Kozjak, Venec, W. of Nova Breznitsa, by road 302, 41°532'32.16''N | 21°13´48.89 E, 1060 m, 8. VIII. 2018, leg. Colin W. Plant, in coll. Richter.

Diagnosis. Species of medium size, of yellowish general appearance. Based on the structure of the male genitalia belongs to the group of *Coleophora kahaourella* Toll, 1957 (known from Spain, Tunisia and Libya) in which there are the following species: *C. pterosparti* Mendes, 1910 (known from Spain and Portugal), *C. cytisanthi* Baldizzone, 1978 (known from Italian oriental Alps and Slovenia), *C. olympica* Baldizzone, 1983 (known from Greece), *C. gredosella* Baldizzone, 1985 (known from Spain), *C. aetnensis* Baldizzone, 2009 (known from Sicily). The species whose the male genitalia most closely resembles that of *C. colinplanti* sp. nov. is *C. olympica* with obvious differences: in the male genitalia of *C. olympica* the tegumen is much narrower and slightly constricted in the middle, the transtilla is smaller, triangular at the apex, the nail-shaped seta of the dorsal part of the valvula is thinner and moved towards the base of the cucullus, the cucullus is narrower and longer, the sacculus is narrower and longer, without the sturdy seta in the dorsal angle, the phallotheca is narrower and longer.

Molecular diagnosis. BIN BOLD: AEH6141 (n = 1, 0 public). The nearest neighbour is *Coleophora kahaourella* Toll, 1957, with 4.65% p-distance.

One specimen of *Coleophora colinplanti* sp. nov. recorded in North Macedonia was successfully barcoded at the Canadian Centre for DNA Barcoding (CCDB, Biodiversity Institute of Ontario, University of Guelph). We obtained a full 658 base-pair long segment of the 5' terminus of cytochrome c oxidase gene; the sequences together with details of the sequenced specimens were uploaded to the Barcode of Life Data Systems (BOLD; Ratnasingham & Hebert 2007). This sequence was compared with sequences of all public records of *C. kahaourella* group available in the BOLD. Barcode data for *C. pterosparti* Mendes, 1910 and *C. olympica* Baldizzone, 1983 were not available to authors in the time of publishing of this work. The sequences were downloaded from BOLD using implemented BOLD multiple alignment algorithm (Ratnasingham & Hebert 2007) and subsequently edited and analysed in MEGA X software (Kumar et al. 2018). Degrees of intra- and interspecific variation in the DNA barcode fragments were calculated under the Kimura 2 parameter (K2P) model of nucleotide substitution using analytical tools in BOLD systems v. 4.0 (http://www.boldsystems.org). A neighbour-joining tree of DNA barcode data of available sequences was constructed using MEGA6 (Tamura et al. 2013) under the K2P model for nucleotide substitutions. It was assigned Barcode Index Numbers (BIN) to all taxa according to Ratnasingham & Hebert (2013).

Description. Wingspan 15 mm. Head white, shiny, mild creamy shaded. Antenna: scape white, light ochre suffused, flagellum ringed white and dark brown. Labial palpus white, light ochre on outer side; second segment about 1.5 times the diameter of the eye and a little longer than the third segment. Proboscis of normal shape. Thorax glossy white, tegula creamy white. Forewing light ochre scattered with white scales at the basis, costal strike white, broad from the base to the middle and then narrow to the apex; costal cilia white, dorsal cilia of ochreous colour. Hindwing brown, darker along the edges; cilia light ochre. Abdomen yellowish white.

Abdomen. Anterior lateral strut about 6 times longer than the posterior, transverse strut with proximal edge straight, sclerotized only in middle, distal edge arched, strong sclerotized. Tergal disks (3rd tergite) about long 7 times their width, covered with about 30 conical spines.

Male genitalia. Gnathos knob oval. Tegumen robust, trapezoidal, pedunculus short, slightly dilated. Transtilla short, wider at the base, rounded at the apex. Valvula large, oval, bristling with long thin setae of different lengths, in the dorsal half a very sturdy, short erect seta, in the shape of a nail. Cucullus rather long, slightly thinner at the base. Sacculus stout, laterally expanded, ventral edge slightly curved, bristling with long thin setae, ventral angle large, curved, dorsal angle blunt in shape, with a sturdy inclined silk seta like a thorn. Phallotheca short and

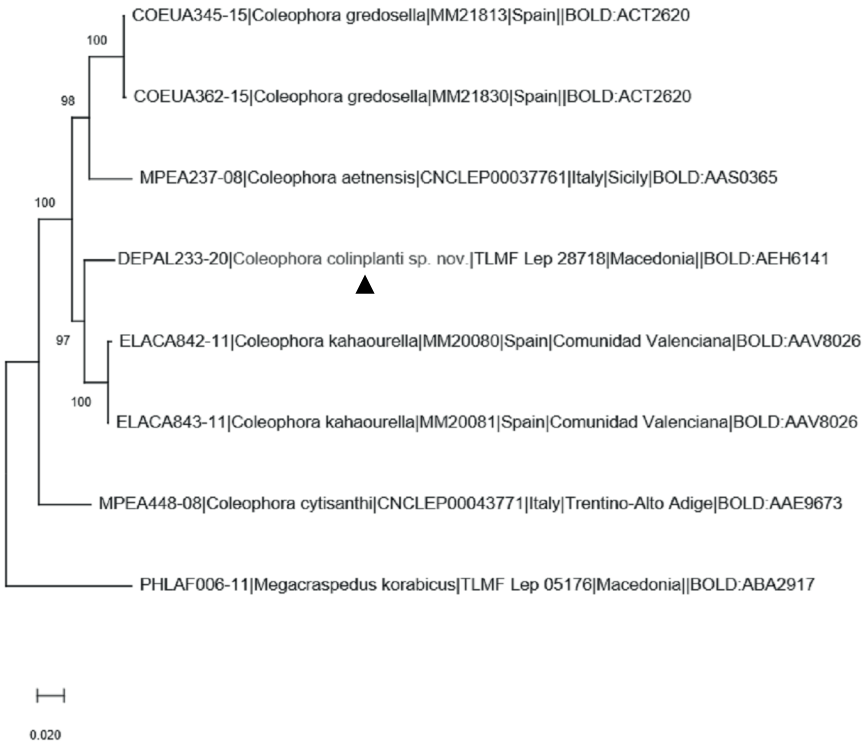


Fig. 1. Molecular diagnosis of the similar species. One specimen of *Coleophora colinplanti* sp. nov. recorded in North Macedonia was successfully barcoded at the Canadian Centre for DNA Barcoding.

stout, more sclerified at the base and dorsally. Cornuti numerous, thorn shaped of different lengths gathered in a long-curved formation, with three cornuti much longer and divergent at the apex.

Female genitalia. Unknown.

Bionomy. The host plant is unknown, but it is probably a plant of family Leguminosae, in analogy with the other species of the group who's the biology is known: *Coleophora pterosparti* (feeding on *Pterospartum tridentatum*), C. *kahaourella* (on *Anthyllis cytisoides*), *C. cytisanthi* (on *Genista radiata*), *C. aetnensis* (on *Genista aetnensis*).

Distribution. North Macedonia.

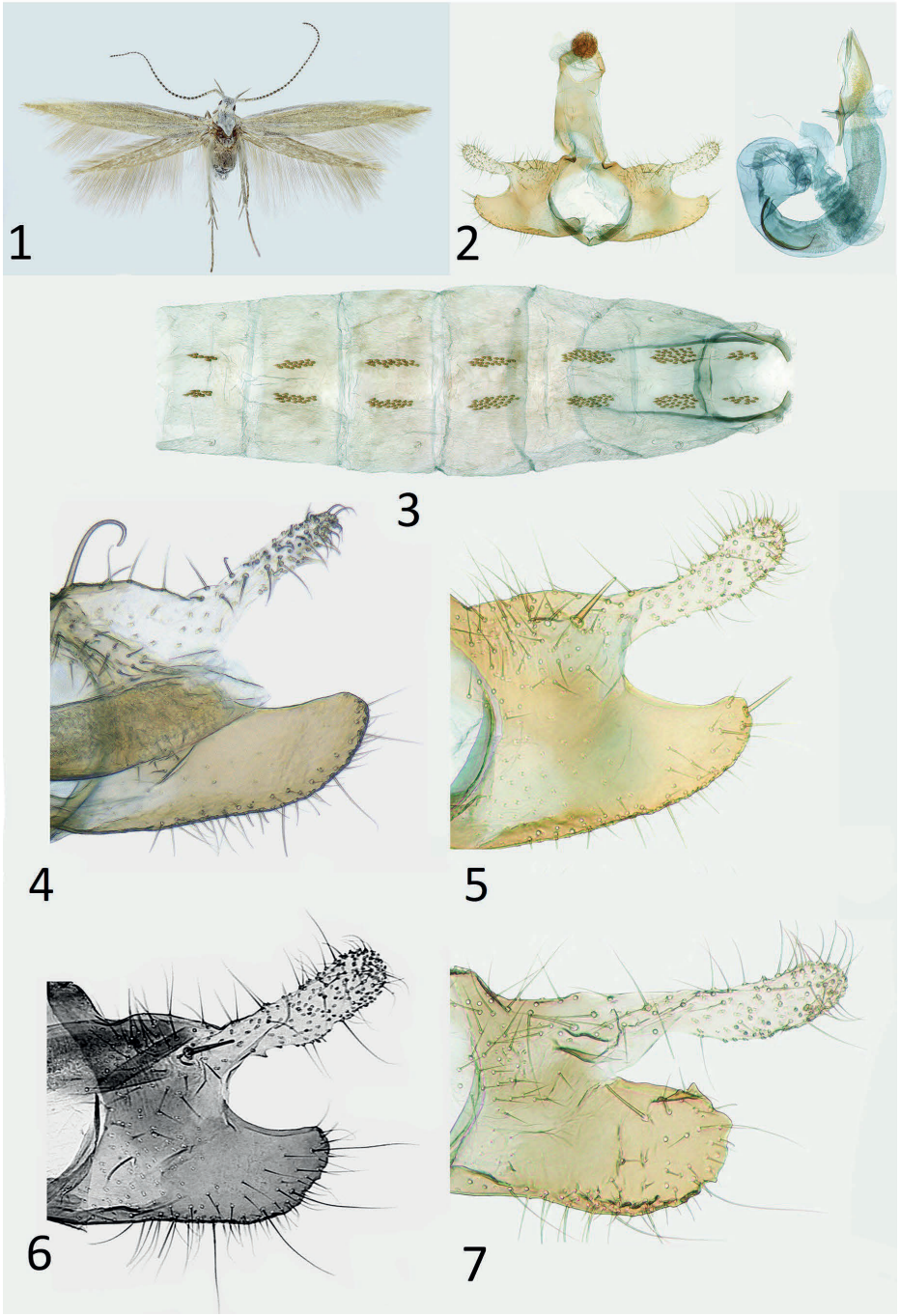
Etymology. The species is dedicated to the British lepidopterologist Colin W. Plant who collected one of the two specimens on which the description of the species is based.

New distributional records

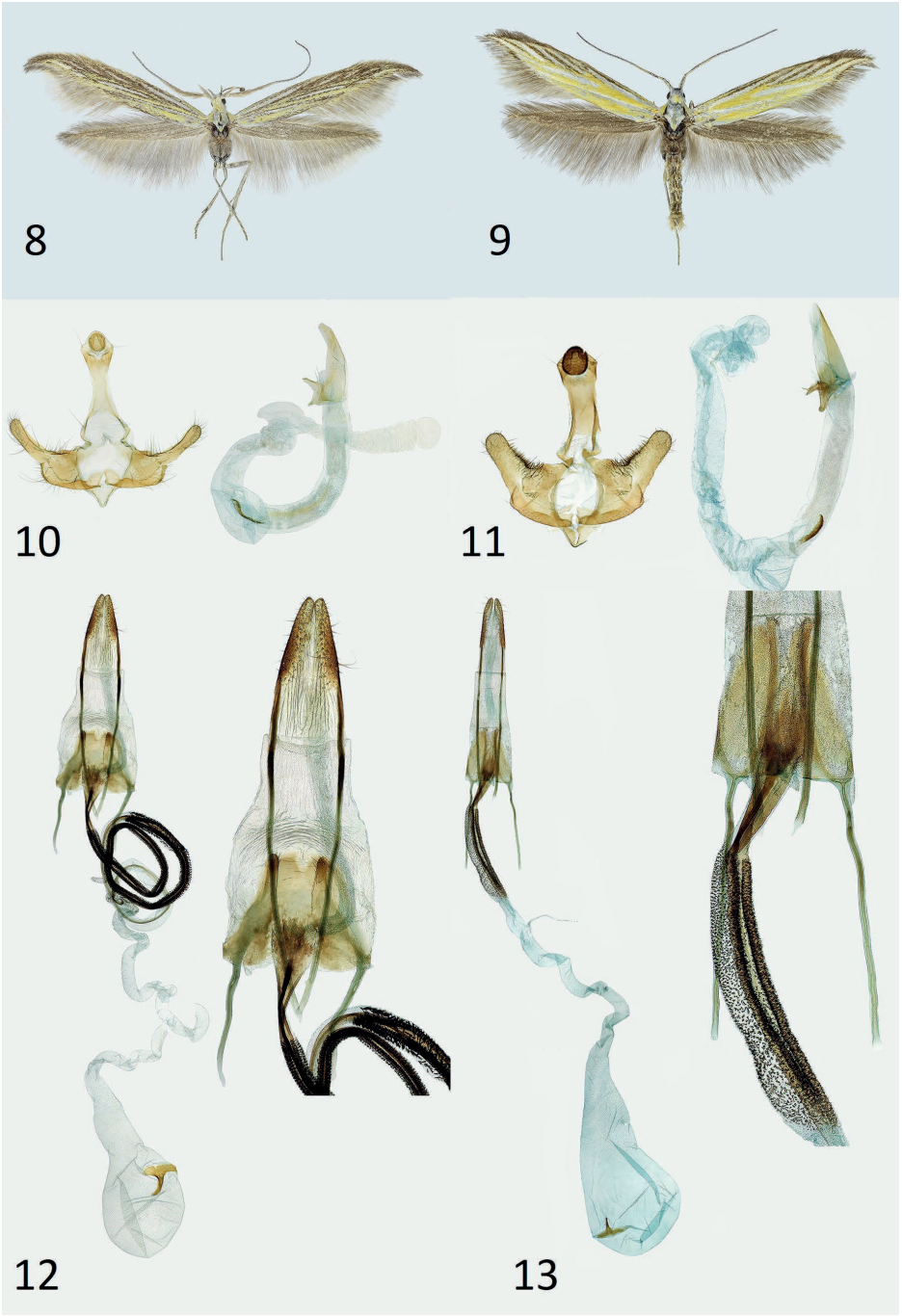
Coleophora serinipennella Christoph, 1872

Slovenia: 1 ♀, Primorska, Koper, Srmin, 27.VII.2007, leg., coll. Gomboc, det. Baldizzone; 1 ♂, 1 ♀ Primorska, Sečoveljske soline, Fontanigge, 2.VI.2019, leg. S. Gomboc & T. Gregor, coll. Gomboc, det. Baldizzone; 1 ♂, ibidem, 16.VI.2012, leg., coll. Gomboc, det. Baldizzone.

Distribution: Spain, southern France, southern Italy, Sicily, Slovenia, Bulgaria, Romania, Ukraine, Russia (Lower Volga), Libya, Algeria, Tunisia, Egypt, Palestine, Central Asia, Ja-



Tab. 1. 1. *Coleophora colinplanti* sp. nov. – adult – HOLOTYPUS; 2. *Coleophora colinplanti* sp. nov. – male genitalia GP 31535 IgR; 3. *Coleophora colinplanti* sp. nov. – abdomen; 4. *Coleophora kahaourella* – sacculus GP; 19528 IgR; 5. *Coleophora colinplanti* sp. nov. – sacculus GP 31535 IgR; 6. *Coleophora olympica* – sacculus GP 2775 Bldz; 7. *Coleophora cytisanthi* – sacculus GP 32244 IgR.



Tab. 2. 8. *Coleophora tricolor* – adult; 9. *Coleophora malatiella* – adult; 10. *Coleophora tricolor* – male genitalia GP 28289 IgR; 11. *Coleophora malatiella* – male genitalia GP 28040 IgR; 12. *Coleophora tricolor* – female genitalia GP 28288 IgR; 13. *Coleophora malatiella* – female genitalia GP 28041 IgR.

pan, Australia (Baldizzone 2019a). The reporting of Slovenia is based on the material listed in this work.

C. herniariae Baldizzone, 2001 (Figs. 31, 33, 35)
North Macedonia: 1 ♂, Krivolak near Negotino, 11.- 12. IV. 2019, leg., coll. Richter.
Bulgaria: 1 ♂ Pirin, Sandanski, Ploski, 200 m, 27.III. - 6.IV.2011, leg. N. Savenkov, det. Baldizzone, coll. Roweck.

Distribution: species described from Turkey; it was subsequently reported for Croatia (Richter 2017). First record for North Macedonia and Bulgaria.

C. niveicostella Zeller, 1839
Serbia: 1 ♂, Tornik Ribna, 1300 m, 16. VI. 2018, leg. Plant, det. & coll. Richter.

Distribution: almost all of Europe, North Africa, Lebanon, Palestine, Turkey, Caucasus (Baldizzone 2019a). First record for Serbia.

C. frischella (Linnaeus, 1758)
North Macedonia: 2 ♂♂, 1 ♀, Mavrovo NP, Korab Mts, Kobilino Pole, 20.- 21. VII. 2015, 1 ♂, 27. VII. 2019, leg., coll. Richter.

Distribution: Finland, Denmark, Germany, France, Spain, Italy, Switzerland, Austria, Czech Republic, Slovakia, Hungary, Montenegro, Greece, Caucasus, Russia (Lower Volga), Afghanistan, Morocco (Baldizzone, 2019a). First record for North Macedonia.

C. cytisanthi Baldizzone, 1978 (Figs. 6, 26, 28, 29)
Slovenia: 1 ♂, Sorisska Planina, Slatnik, 1500 m, 6.VII.2000, leg, coll. Tokár, det. Baldizzone; 1 ♀, Soča, 24. V. 2001 leg. & coll. Líška, det. Richter, ibidem, 1 ♂, 1 ♀, 23. VII. 2004, 1 ♂, 26. VI. 2010, 1 ♂, 9. V. 2015, 2 ♂♂, 4 ♀♀, 10. VIII. 2018, leg. Skyva, det. Richter, coll. Skyva & Richter; 1 ♂, Julijske Alpe, Veliki Mangart, Mangartska koča, 1800-1950 m, 3.VIII.2019, leg., coll. Gomboc, det. Baldizzone.

Distribution: known only in the north-eastern Italian Alps and in Slovenia (Baldizzone, 2019a). The first citation for Slovenia derives from the study of the specimen collected in 2000 by Tokár.

C. squamella Constant, 1885
North Macedonia: 1 ♂, Pepelište near Negotino, 18. IV. 2018, leg., coll. Richter.

Distribution: France, Italy, Sardinia, Austria, Czech Republic, Slovakia, Hungary, Slovenia, Croatia, Bulgaria, Romania, Ukraine, Turkey (Baldizzone, 2019a). First record for North Macedonia.

C. curictae Baldizzone, 2016
Slovenia: 1 ♂, Notranjska, Suha krajina, Rakov Škocjan, 517 m, 1.VII.2008, leg., coll. Gomboc, det. Baldizzone; 6 ♂♂, Primorska, Regijski park Škocjanske jame, Matavun, 438 m, 26.VI.2019, 1 ♂, 30.VI.2019, leg., coll. Gomboc, det. Baldizzone.
Greece: 1 ♂, Epirus, Mitsikeli Mt. bei Ioannina, 1170 m, 7.VII.2005, leg., coll. Mayr, det. Baldizzone.

Distribution: Italy, Austria, Germany, Croatia, Montenegro. First record for Slovenia and Greece.

C. didymella Chrétien, 1899
Bulgaria: 1 ♂, Stara Zagora Dubrava, 458 m, 5.V. 2019, leg. Beškov & Nahirnić, det. & coll. Richter.

Distribution: France, Italy, Hungary, North Macedonia, Turkey (Baldizzone, 2019a). First record for Bulgaria.

C. mareki Tabell & Baldizzone, 2014
SERBIA: 1 ♂, Dukat Mts., 820 m, 31. V. 2018, leg. Plant, det. & coll. Richter.
Distribution: France, Italy, Sardinia, Austria, Czech Republic, Slovakia, Hungary, Croatia, North Macedonia, Bulgaria, Greece, Ukraine, Turkey, Iraq (Baldizzone, 2019a). First record for Serbia.

C. flaviella Mann, 1857
Serbia: 1 ♀, Dukat Mts,. 820 m, 31. V. 2018, leg. Plant, det. & coll. Richter.
Distribution: Portugal, Spain, France, Italy, Sicily, Germany, Austria, Czech Republic, Slovakia, Croatia, Hungary, Romania, Greece, Turkey, Libya, Iran (Baldizzone 2019a). First record for Serbia.

C. quadristraminella Toll, 1961
Bulgaria: 1 ♂, Besaparian hills, Isperihovo, 3. V. 2016, leg., coll. Richter; 1 ♂, Petrich, Malak Kozhukh, 4. IX. 2019, leg., coll. Richter.
Distribution: France, Italy, Sicily, Croatia, Romania, North Macedonia, Greece, Crimea, Ukraine, Turkey, Armenia, Russia (Southern Urals), Egypt (Baldizzone 2019a). First record for Bulgaria.

C. agrianella Rebel, 1934 (Figs. 15, 17, 19)
North Macedonia: 1 ♂, Prilep, 8. IX. 2014 ex larva *Onobrychis* sp., 6 ♂♂, 2 ♀♀ 26.- 27. VII. 2015, 4 ♂♂, 1♀, 26. VIII.- 2.IX.2016, 5 ♂♂, 2 ♀♀, 10. IX. 2021, leg., coll. Richter; 1 ♂, Bjelovodica, 31. VII. 2019, leg., coll. Richter; 2 ♂♂, Latovo, 29. VIII. 2016, leg., coll. Richter; 1 ♂, Pepelište near Negotino, 1. IX. 2021, leg., coll. Richter.
Distribution: Described from North Macedonia, is known also for Serbia, Bulgaria, and Greece.

C. tricolor Walsingham, 1899 (Figs. 8, 10, 12)
North Macedonia: 4 ♂♂, 1 ♀, Galičica NP, 1676 m, 5. 7. 2018, leg., coll. Richter.
Distribution: Described from Great Britain, is known also for Switzerland (Uffen 1967), France, Greece (Baldizzone *et al*., 2014). New record for North Macedonia.

C. malatiella Toll, 1952 (Figs. 9, 11, 13)
North Macedonia: 2 ♂♂, Krivolak near Negotino, 16.-17. V. 2018, 1 ♂, 23.- 24. V. 2018, leg., coll. Richter; 1 ♂, Pepelište near Negotino 27. V. 2018, leg., coll. Richter.
Distribution: Romania, Turkey, Iran (Baldizzone *et al*., 2006); Crimea (Budashkin & Falkovitsh 2007). First record for North Macedonia.

C. caucasica Stainton, 1867
Bulgaria: 1 ♂, 1 ♀, Besaparian hills, Isperihovo, 3. VI. 2016, leg., coll. Richter.
Distribution: Turkey, northern Caucasus Region, Georgia, and Armenia (Baldizzone, 2016). Recently discovered in Europe: Slovakia (Tokár *et. al.* 2021), Hungary (Szabóky & Takács 2021). First record for Bulgaria.

C. hartigi Toll, 1944
Serbia: 1 ♂, Tornik Ribna 1300 m, 16. VI. 2017, leg. Plant, det. & coll. Richter.
Distribution: Italy, Austria, Germany, Czech Republic, Slovakia, Hungary, Croatia, Bulgaria, North Macedonia, Montenegro, Albania, Greece, Turkey (Baldizzone 2019a). First record for Serbia.

C. glaseri Toll, 1961
Slovenia: 1 ♀, Bela Krajina, Krajinski park, Kolpa, Vinica, Golek, 19.V.2017, leg., coll. Gomboc, det. Baldizzone; 1 ♂, Notranjska, Koritnice, 610 m, 6.VI.2020, leg. Gomboc & Zadravec, det., coll. Baldizzone.

Distribution: Austria, Croatia, Czech Republic, Slovakia, Hungary, and Bulgaria (Baldizzone 2019b). First record for Slovenia.

C. audeoudi Rebel, 1935 (Figs. 14, 16, 18)
North Macedonia: 1 ♂, Pepelište near Negotino, 8.- 9. VI. 2017, 1 ♂, 18.- 19. VI. 2018, 5 ♂♂, 1 ♀, 26. V. 2018, 1 ♂, 27. V. 2018, 8 ♂♂, 28. V. 2018, leg., coll. Richter; 1 ♀, Krivolak near Negotino, 10.- 12. VI. 2017, 9 ♂♂, 6 ♀♀, 16.- 17. V. 2018, 2 ♂♂, 23- 24. V. 2018, leg., coll. Richter.

Distribution: Known only from North Macedonia and Turkey (Baldizzone 1994).

C. laconiae Baldizzone, 1983 (Figs. 32, 34)
North Macedonia: 1 ♂, Pepelište near Negotino, 1. IX. 2021, leg., coll. Richter.

Distribution: Only known from the Mount Taygetos (Greece). First record for North Macedonia.

C. eupepla Gozmány, 1954
Bulgaria: 3 ♂♂, 4 ♀♀, Sandanski - Ploski, 5. VI. 2016, leg., coll. Richter; 3 ♂♂, 6 ♀♀, Melnik, leg. Dvořák, det. & coll. Richter.

Distribution: known for Hungary, North Macedonia, Spain, France, Greece, Turkey, Russia (Baldizzone & Tabell 2005), Crimea (Budashkin & Falkovitsh 2007) recently recorded for Bulgaria (Buschmann *et al*. 2014).

C. salinella Stainton, 1859
Slovenia: 1 ♀, Slovensko primorje, Sečovlje, soline, 6.IX.2002; 1 ♂, ibidem, leg. coll. Gomboc, det. Baldizzone; 1 ♂, ibidem, 14.IX.2012, leg. & coll. Šumpich, det. Richter,
Croatia: 1 ♂, Lošinj, Nerezine 26. VIII.- 2. IX. 2017, leg. Vicherek, det. Richter, coll. Šumpich.

Distribution: Great Britain, Holland, Spain, Belgium, France, Italy, Sicily, Germany (?), Slovakia, Hungary, Bulgaria, Cyprus, Ukraine, Crimea, Russia (Lower Volga), Caucasus, Armenia, Western Siberia (Baldizzone 2019a). First record for Slovenia and Croatia.

C. filaginella Fuchs, 1881
Bulgaria: 3 ♂♂, Melnik 5. V. 2018, leg. Dvořák, det. & coll. Richter.
Distribution: Finland, Latvia, Germany, North Macedonia, Romania, Greece, Turkey (Baldizzone, 2019c). First record for Bulgaria.

C. halophilella Zimmermann, 1926
Slovenia: 1 ♀, Slovensko primorje, Sečoveljske soline, 6.IX.2000; 3 ♀♀, 4.X.2002, leg., coll. Lasan, det. Baldizzone; 3 ♂♂, 3 ♀♀ , ibidem, 3.IX.2002, 4 ♀♀, 14.IX.2012, leg., coll. Gomboc, det. Baldizzone; 2 ♂♂, 4 ♀♀, ibidem, 27.IX.2012, leg. Gomboc & Zadravec, coll. Gomboc, det. Baldizzone; 1 ♀, ibidem, 14. IX. 2012, leg. & coll. Šumpich, det. Richter.

Distribution: France, Italy, Austria, Slovenia, Croatia, Czech Republic, Slovakia, Poland, Hungary, Romania, Greece, Crete, Russia, Ukraine, China (Baldizzone, 2019a). The presence of the species in Slovenia derives from the data of collection Gomboc listed above.

C. autumnella (Duponchel, 1844) (Figs. 20, 22, 24)
Slovenia: 1 ♂, Soča, 10. VIII. 2018, leg. & coll. Skyva, det. Richter.

Distribution: Spain, Austria, Slovakia, Czech Republic, Romania (Baldizzone et al., 2004), recently recorded for the French Maritime Alps (Nel & Varenne 2019). New record for Slovenia.

C. gardesanella Toll, 1954
Slovenia: 1 ♂, Primorska, Koper/Capodistria, 27.VII.2018, leg., coll. Gomboc, det. Baldizzone.

Distribution: Poland, Finland, Estonia, Latvia, Great Britain, Belgium, France, Italy, Sicily, Austria, Croatia, Armenia, Russia (Lower Volga) (Baldizzone 2019a). First record for Slovenia.

C. sternipennella (Zetterstedt, 1839)
North Macedonia: 1 ♀, Latovo, 29. VIII. 2016, leg., coll. Richter; 1 ♀, Galičica NP, Asan Gjura, 28. VIII. 2021, leg., coll. Richter.

Distribution: almost all of Europe, the Caucasus, Russia (Lower Volga, Siberia, Transbaikalia), Korea, Japan (Baldizzone, 2019a). First record for North Macedonia.

C. jaernaensis Björklund & Palmqvist, 2002
Croatia: 1 ♀, Zagrebačka Županija, Ivanić-Grad, 99 m, 27.VI.2020, leg., coll. Gomboc, det. Baldizzone.

Distribution: Norway, Sweden, Finland, and Denmark, it has recently been reported from Hungary (Szabóky & Takács 2021). New record for Croatia.

C. coarctataephaga Toll, 1961 (Figs. 21, 23, 25)
North Macedonia: 2 ♂♂, Pepelište near Negotino, 1 ♂, 3. IX. 2016, 1 ♂, 26.- 27. VI. 2017, 1 ♀, 28. VIII. 2017, 6 ♂♂, 18.-19. V. 2018, 2 ♂♂, 25. V. 2018, 1 ♂, 10. VII. 2018, 1 ♂, 16.- 17. IV. 2019, 2 ♂♂, 1. IX. 2021, leg., coll. Richter; 1 ♀, Krivolak near Negotino, 20.-24. IV. 2017, 1 ♀, 18. V. 2017 ex larva Achillea coarctata, 1 ♀, 16.-17. V. 2018, 1 ♂, 19.-20. IV. 2019, 2 ♀♀, 1.- 2. VIII. 2019, leg., coll. Richter; 1 ♂, Latovo, 21. VI. 2016, 1 ♀, 29. VIII. 2016, 3 ♂♂, 17.- 18. VI. 2017, 2 ♂♂, 22. V. 2018, 1 ♀, 30. VI. 2018, leg., coll. Richter; 1 ♂, Gopceli, 6. VI. 2014 ex larva Achillea collina, leg., coll. Richter; 1 ♀, Modrište 28. VIII. 2016, leg., coll. Richter; 1 ♀, Bjelovodica 31. VII. 2019, leg., coll. Richter; 2 ♂♂, Kutlešovo, 1. IX. 2016, leg., coll. Richter; 5 ♂♂, 1 ♀, Sirhan, 31. VIII. 2016, leg., coll. Richter; 2 ♂♂, Prilep, 6. VI. 2014, 2 ♂♂, 10. VI. 2016, 1 ♀, 2. IX.9. 2016, leg., coll. Richter. Bulgaria: 1 ♂, Sandanski – Ploski, 5. VI. 2016, leg., coll. Richter.

Distribution: North Macedonia, Albania, Greece, Bulgaria, Romania, Armenia (Baldizzone *et al*. 2004). First record for Bulgaria. Only *Achillea coarctata* was known as a host plant and therefore the specimen bred by *A. collina* in North Macedonia adds a new datum on host plants.

C. corsicella Walsingham, 1898
North Macedonia: 1 ♀, Pepelište near Negotino, 3. IX. 2016, 1 ♂, 8.- 9. VI. 2017, 1 ♀, 28.- 29. V. 2018, 1 ♀, 22. VI. 2018, leg., coll. Richter; 1 ♀, Sirhan, 31. 8. 2016, leg., coll. Richter. BULGARIA: 1 ♀, Sandanski- Ploski 5. VI. 2016, leg., coll. Richter; 1 ♀, Petrich, Malak Kozhukh, 4. IX. 2016, leg., coll. Richter; 1 ♀, Melnik, 5. V. 2018, leg. Dvořák, det. & coll. Richter.

Distribution: Spain, France, Corsica, Italy, Slovakia, Hungary, North Macedonia, Greece, Ukraine, Russia (Southern Urals), Turkey (Baldizzone 2019a). New record for Bulgaria.

C. odorariella Mühlig & Frey, 1857
North Macedonia: 1 ♂, Pepelište near Negotino, 25. V. 2018, 1 ♂, 22. IV. 2019, 4 ♂♂, 3. -4. VIII. 2019, 3 ♂♂, 4 ♀♀, 5. VIII. 2019, leg., coll. Richter; 1 ♂, Krivolak near Negotino, 20.-24. IV. 2017, 9 ♂♂, 3 ♀♀, 16.- 17. V. 2018, 3 ♂♂, 23.- 24. V. 2018, 6 ♂♂, 19.- 20. IV. 2019, 1 ♀, 1.- 2. VIII. 2019, leg., coll. Richter.

Distribution: Spain, Italy, Germany, Austria, Czech Republic, Slovakia, Hungary, North Macedonia, Romania, Ukraine, Russia, Turkey (Baldizzone 2019a). Based on the data listed above, the species appears to be quite abundant in North Macedonia.

C. riffelensis Rebel, 1913
North Macedonia: 3 ♂♂, 1 ♀, Bjelovodica 9. IX. 2021, leg., coll. Richter; 3 ♂♂, 1 ♀, Galičica NP, Asan Gjura, 28. VIII. 2021, leg., coll. Richter; 1 ♀, Latovo, 11. 9. 2021, leg., coll. Richter.

Croatia: 1 ♂, Goriš, 14. IX. 2018, leg., coll. Richter.

Distribution: Spain, France, Italy, Switzerland, Austria, Czech Republic, Slovakia, Hungary, Latvia, Estonia, Russia, North Macedonia, Ukraine, Turkey, Iran (Baldizzone 2019a). New record for Croatia.

C. dianthivora Walsingham, 1901 (Figs. 27, 30)
Croatia: 1 ♀, Zaton, 13. X. 2019, leg. & coll. Laštuvka, det. Richter.

Distribution: Known only from Spain, southern France, southern Italy (Baldizzone 2019a). New record for Croatia.

C. amellivora Baldizzone, 1979
Slovenia: 1 ♂, Soča, 9. V. 2015, 1 ♂, 2 ♀♀, 10. VIII. 2018, leg. & coll. Skyva, det. Richter.

Distribution: Sweden, Finland, Estonia, Latvia, Belgium, France, Italy, Germany, Austria, Czech Republic, Slovakia, Hungary, Ukraine, Russia (Baldizzone 2019a). New record for Slovenia.

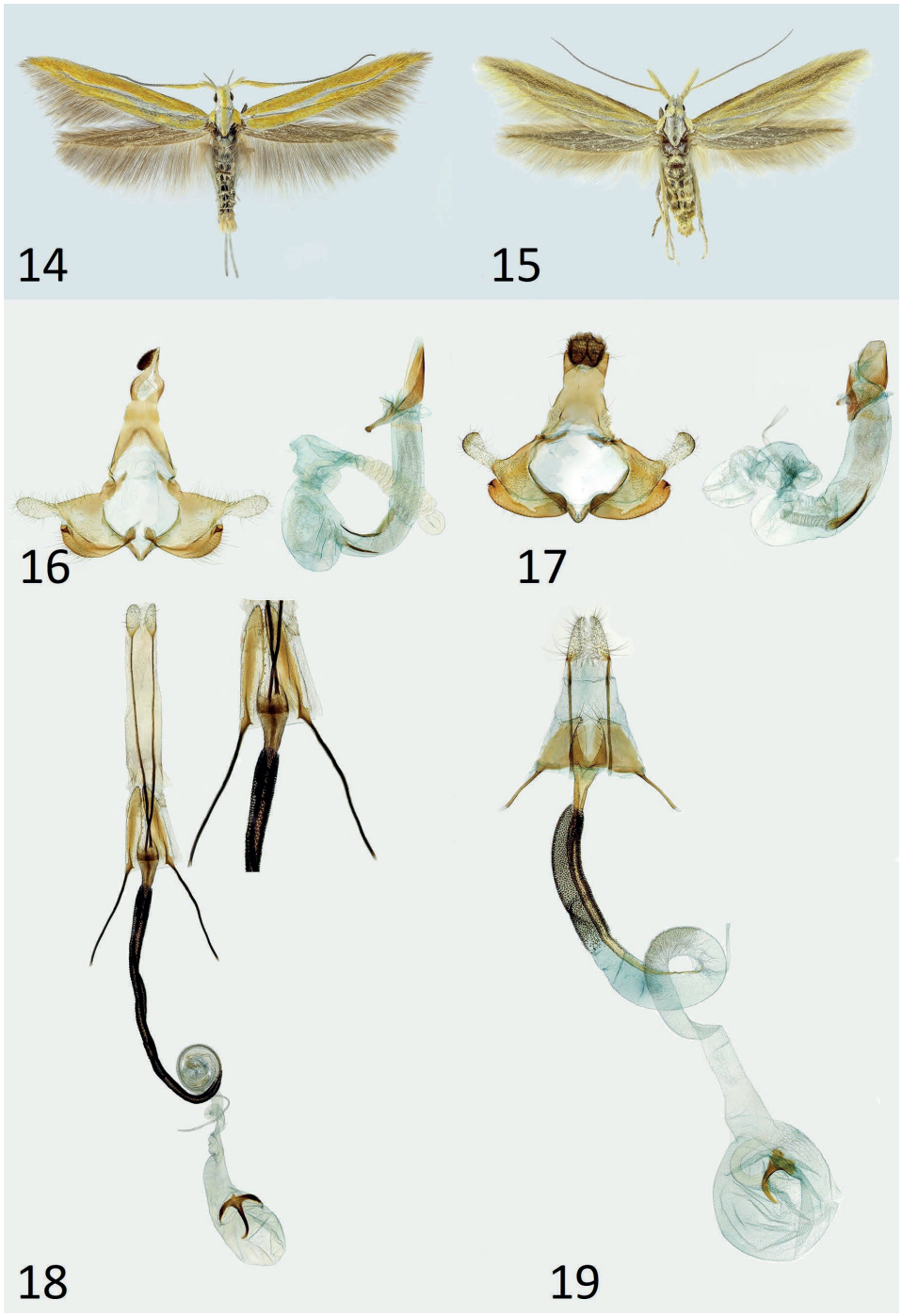
C. algidella Staudinger, 1857
North Macedonia: 2 ♂♂, 3 ♀♀, Mavrovo NP, Korab Mts., Kobilino Pole, 20.- 21. VII. 2015, 1 ♂, 3. VII. 2018, leg., coll. Richter; 2 ♂♂, Galičica NP, 15.- 16. VI. 2017, leg., coll. Richter; 1 ♂, 1 ♀, Bjelovodica, 13.- 14. 6. 2017, leg., coll. Richter.

Distribution: Iceland, Norway, Portugal, Spain, France, Italy, Turkey, China, Japan (Baldizzone 2019a). New record for North Macedonia.

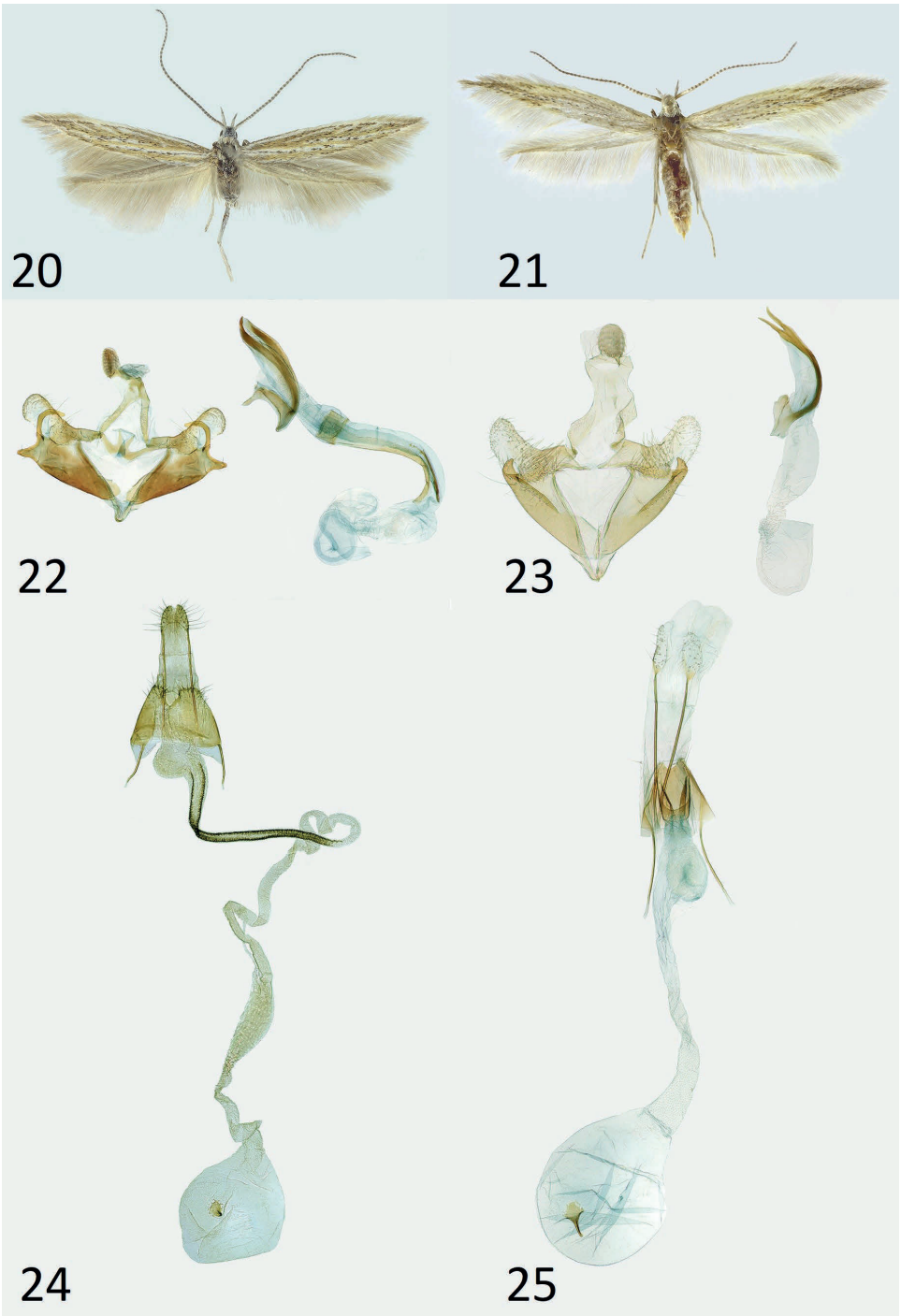
C. auroguttella (Zeller, 1849)
Croatia: 1 ♂, Tisno, 17. VIII. 2014, leg., coll. Richter.
North Macedonia: 1 ♀, Pepelište near Negotino 25.- 26. VIII. 2016, leg., coll. Richter.

Distribution: Portugal, Spain, France, Italy, Austria, Czech Republic, Slovakia, Poland, Hungary, Romania, Greece, Russia (Lower Volga), Kazakhstan, Caucasus (Baldizzone 2019a). New record for Croatia and North Macedonia.

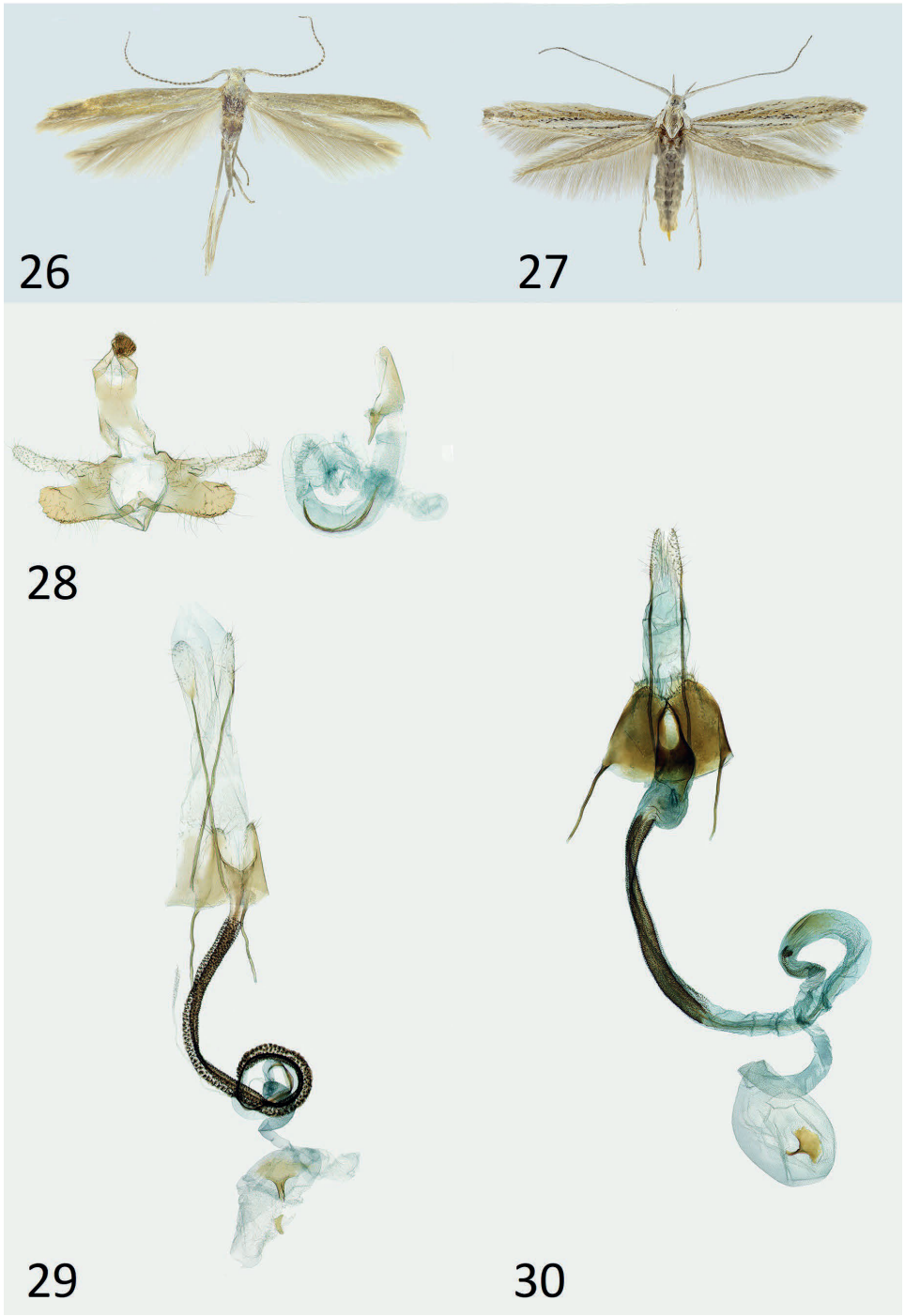
Acknowledgements. Thanks to all those who have sent material for the determination- several Czech and Slovenian colleagues and other friends, and personally Colin W. Plant - Hertfordshire, England.



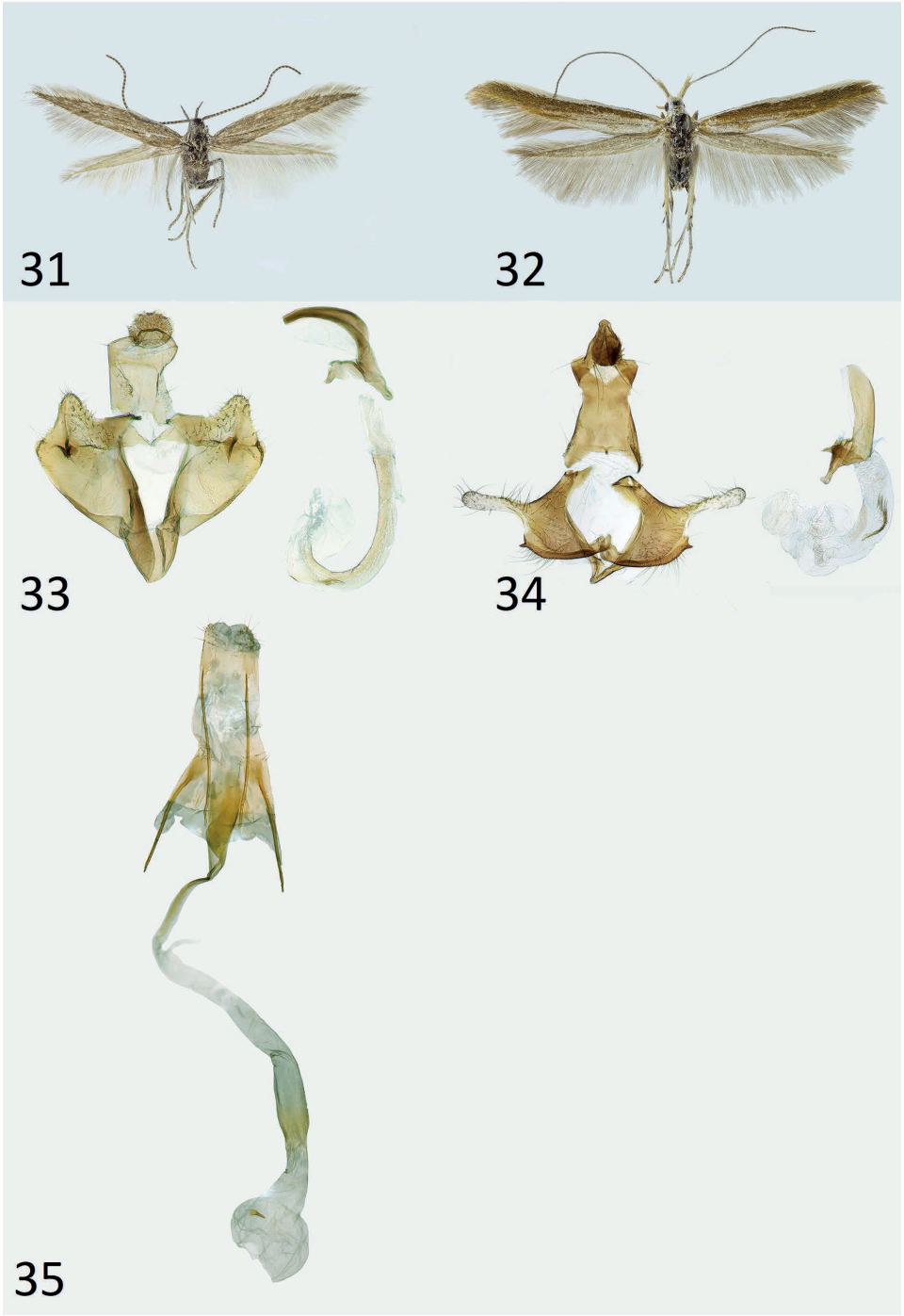
Tab. 3. 14. *Coleophora audeoudi* – adult; 15. *Coleophora agrianella* – adult; 16. *Coleophora audeoudi* – male genitalia GP 28803 IgR; 17. *Coleophora agrianella* – male genitalia GP 29057 IgR; 18. *Coleophora audeoudi* – female genitalia GP 32240 IgR; 19. *Coleophora agrianella* – female genitalia GP 23305 IgR.



Tab. 4. 20. *Coleophora autumnella* – adult; 21. *Coleophora coarctataephaga* – adult; 22. *Coleophora autumnella* – male genitalia GP 7160 Z. Tokár; 23. *Coleophora coarctataephaga* – male genitalia GP 24803 IgR; 24. *Coleophora autumnella* – female genitalia GP 28432 IgR; 25. *Coleophora coarctataephaga* – female genitalia GP 24786 IgR.



Tab. 5. 26. *Coleophora cytisanthi* – adult; 27. *Coleophora dianthivora* – adult; 28. *Coleophora cytisanthi* – male genitalia GP 32244 IgR; 29. *Coleophora cytisanthi* – female genitalia GP 32243 IgR; 30. *Coleophora dianthivora* – female genitalia GP 29489 IgR.



Tab. 6. 31. *Coleophora herniariae* – adult; 32. *Coleophora laconiae* – adult; 33. *Coleophora herniariae* – male genitalia GP 28880 IgR; 34. *Coleophora laconiae* – male genitalia GP 31565 IgR; 35. *Coleophora herniariae* – female genitalia GP 14310 Bldz.

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